Part 4
Program Design

References:
(a) DoD Directive 5000.1, "Defense Acquisition," 15 Mar 96 (NOTAL)
(b) DoD Regulation 5000.2-R, "Mandatory Procedures for Major Defense Acquisition Programs (MDAPs) and Major Automated Information System (MAIS) Acquisition Programs," 15 Mar 96 (NOTAL)
(c) SECNAVINST 3960.6, "Department of the Navy Policy and Responsibility for Test, Measurement, Monitoring, Diagnostic Equipment and Systems, and Metrology and Calibration (METCAL)," 12 Oct 90 (NOTAL)
(d) ISO 9001 "Quality Systems - Model for quality assurance in design/development, production, installation and servicing" (NOTAL)
(e) ISO 9002 "Quality Systems - Model for quality assurance in production, installation and servicing" (NOTAL)
(f) USD(A&T) memorandum, "Single Process Initiative," 8 Dec 95 (NOTAL)
(g) SECNAVINST 4855.3, "Product Deficiency Reporting and Evaluation Program (PDREP)," 31 Mar 87 (NOTAL)
(h) SECNAVINST 4855.5A, "Product Quality Deficiency Report Program," 20 Jul 93 (NOTAL)
(i) SECNAVINST 4855.6, "Navy Quality Deficiency Reporting Program," 3 Feb 88 (NOTAL)
(j) MCO 4855.10B, "Product Quality Deficiency Report (PQDR)," 26 Jan 93 (NOTAL)
(k) SECNAVINST 5234.2A, "Ada Programming Language Policy," 28 Apr 94 (NOTAL)
(l) SECNAVINST 5420.188D, "Program Decision Process," 31 Oct 95 (NOTAL)
(m) MCO 3093.1C, "Intraoperability and Interoperability of Marine Corps Tactical C4I2 Systems," 15 Jun 89 (NOTAL)
(n) Assistant Secretary of the Navy (Research, Development and Acquisition) Memorandum, "Implementation of Department of Defense Policy on Specifications and Standards," 27 Jul 94 (NOTAL)
(o) Assistant Secretary of the Navy (Research, Development and Acquisition) Memorandum, "Navy Implementation of Department of Defense Policy on Specifications And Standards Reform," 21 Dec 94 (NOTAL)

(p) Office of Management and Budget (OMB) Circular A-119, "Federal Participation in the Development and Use of Voluntary Standards," 20 Oct 93 (NOTAL)
(q) OPNAVINST 3432.1, "Operations Security," 29 Aug 95 (NOTAL)
(r) DoD 5200.1-M, "Acquisition Systems Protection Program," 16 Mar 94 (NOTAL)
(s) SECNAVINST 5239.3, "Department of the Navy Information Systems Security (INFOSEC) Program," 14 Jul 95 (NOTAL)
(t) OPNAVINST 2400.20E, "Navy Management of the Radio Frequency Spectrum," 19 Jan 89 (NOTAL)
(u) OPNAVINST 2450.2, "Electromagnetic Capability Program Within the Department of the Navy," 8 Jan 90 (NOTAL)
(v) DoD Instruction 5000.56, "Programming Unique Mapping, Charting, and Geodesy (MC&G) Requirements for Developing Systems," 11 Sep 91 (NOTAL)
(w) SECNAVINST 5430.79B, "Naval Oceanography Policy, Relationships and Responsibilities," 14 Jul 86 (NOTAL)
(x) SECNAVINST 5200.39, "Participation in the Government-Industry Data Exchange Program (GIDEP)," 22 Jun 95 (NOTAL)

4.1 Purpose

The purpose of this part is to establish the basis for a comprehensive, structured, integrated and disciplined approach to the life-cycle design of weapons and information technology systems, applicable to all Department of the Navy (DON) acquisitions in accordance with references (a) and (b).

4.2 Integrated Process and Product Development

Program Executive Officers (PEOs), Systems Command (SYSCOM) Commanders, Direct Reporting Program Managers (DRPMs), and program managers (PMs) shall ensure the elements of integrated process and product development (IPPD) are implemented in executing all programs under their cognizance. See reference (b), paragraph 4.2, for further implementation requirements for all DON programs.

4.2.1 Integrated Product Teams and IPPD

PMs shall ensure design activities implement the procedures necessary to concurrently develop products and their associated processes. Development efforts shall result in an optimal product design and associated manufacturing, test, and support processes that meet the user's needs. See reference (b), paragraph 4.2, for further implementation requirements for all

DON programs.

4.2.2 Integrated Technical Information Database

PMs shall, when practicable, develop and use an integrated technical information database between operational, maintenance, logistics, supply, and training users to facilitate the use of design, engineering, manufacturing, production, and logistics support information to eliminate duplication and effectively reduce life-cycle support costs.

4.3 Systems Engineering

PMs shall use a systems engineering process to translate operational requirements into a system solution that includes the design, test, manufacturing and support processes and products.

The following subject areas shall be part of the systems engineering process and their impact on the product design shall be determined with respect to total system cost, schedule, performance, and technical risk. See reference (b), paragraph 4.3, for further implementation requirements for all DON programs.

4.3.1 Manufacturing and Production

Reference (c) provides policies, procedures, and responsibilities for implementing integrated diagnostics, measurement, monitoring, and calibration systems in support of manufacturing and production. See reference (b), paragraph 4.3.1, for implementation requirements for all DON programs.

4.3.2 Quality

References (d) and (e) are the preferred models for quality management systems. Contractors may propose alternative systems, as long as they are technically acceptable and accomplish program objectives. The use of advanced quality practices and quality requirements shall be considered, if necessary, to assist in reducing risk, assuring quality, and controlling costs.

For existing contracts, the procedures set forth in reference (f) shall be applied to all Navy contractors proposing a transition from MIL-Q-9858 to the International Organization for Standardization (ISO) 9000 series, or equivalent. See reference (b), paragraph 4.3.2, for further implementation requirements for all DON programs.

4.3.2.1 Past Performance

PMs shall consider past performance when evaluating competitively negotiated acquisitions (see 48 Code of Federal Regulations (CFR) 9, 48 CFR 15, and 48 CFR 42). Reference (g)

provides specific procedures for obtaining past performance quality information, using the Product Deficiency Reporting and Evaluation Program.

4.3.2.2 Deficiency Reporting

PMs shall: (1) report discrepancies or deficiencies in material shipments and request billing adjustments (see 41 CFR 101) and (2) implement corrective/preventative actions to preclude recurrence of quality deficiencies.

Reference (g) provides policies, procedures and responsibilities for implementing and monitoring a unified, automated product deficiency reporting and evaluation system.

Reference (h) provides procedures for reporting product deficiencies across component lines.

Reference (i) provides specific Navy procedures for quality deficiency reporting and administration.

Reference (j) provides specific Marine Corps product quality deficiency reporting procedures.

4.3.3 Acquisition Logistics

The PM shall use the acquisition coordination team (ACT), when established, to the maximum practical extent to ensure that acquisition logistics is given the appropriate level of attention during the acquisition process. Acquisition logistics support programs shall be planned, managed, executed, and resourced such that full logistics support will be in-place at system initial operational capability (IOC). See reference (b), paragraph 4.3.3, for further implementation requirements for all DON programs.

4.3.3.1 Supportability Analyses

1. Supportability analyses are a key part of the overall acquisition strategy, source selection, and system design and shall be accomplished in support of these activities throughout the acquisition process.

2. Supportability analyses shall support acquisition planning, level of repair and reliability-centered maintenance decisions, program tradeoffs, and the formation of contract provisions.

See reference (b), paragraph 4.3.3.1, for further implementation requirements for all DON programs.

4.3.3.2 Support Concepts

Support concepts shall satisfy user requirements for meeting and sustaining readiness thresholds and objectives, responsive transition to the support and maintenance infrastructure, and life-cycle cost effectiveness. Program managers shall consider alternative maintenance concepts in support of the operational scenario as inputs to life cycle cost analyses and design trade-offs. Acquisition planning documents shall address and document compliance with the following four criteria for developing an executable support concept:

1. Total life-cycle cost of ownership
2. Maintenance concepts
3. Standardization
4. Supportability

See reference (b), paragraph 4.3.3.2, for further implementation requirements for all DON programs.

4.3.3.3 Support Data

The DON's database for the dissemination of weapon system operating and support (O&S) costs is the DON Visibility and Management of Operating and Support Costs (VAMOSC). Naval Center for Cost Analysis (NCCA) shall have overall program management responsibility for VAMOSC. See reference (b), paragraph 4.3.3.3, for further implementation requirements for all DON programs.

4.3.3.4 Support Resources

Support analyses shall determine integrated logistics support (ILS) resource requirements for the program's initial planning, execution, and life-cycle support. Recommendations for fleet introduction/deployment shall be based on adequate support resources to meet and sustain support performance threshold values and demonstrate adequate means to transition support to organic support infrastructure, if planned. See reference (b), paragraph 4.3.3.4, for further implementation requirements for all DON programs.

4.3.4 Open Systems Design

See reference (b), paragraph 4.3.4, for implementation requirements for all DON programs.

4.3.5 Software Engineering

The milestone decision authority (MDA) shall provide specific mandatory implementation requirements for all DON programs. See reference (b), paragraph 4.3.5, for implementation

requirements for all DON programs.

4.3.5.1 Software Language

Selection of software programming languages shall be governed by reference (b). The DON Ada waiver policy is contained in reference (k).

4.3.6 Reliability, Maintainability, and Availability

These elements are an integral part of the systems engineering process and establish the basis for a comprehensive effort designed to assure meeting mission needs and reducing life-cycle ownership costs.

To establish adequate and complete performance requirements, a design reference mission profile shall be developed from the ORD that includes functional and environmental profiles that:

1. Define the boundaries of the performance envelope,

2. Provide the timelines (e.g., environmental conditions and applied or induced stresses over time) typical of operations within the envelope, and

3. Identify all constraints (e.g., conditions of storage, maintenance, transportation, and operational use), where appropriate.

Mission or safety-critical single point failures shall be avoided. If a mission or safety-critical single point failure mode cannot be eliminated through design, the design must be made robust (e.g., insensitive to the causes of failure, exhibiting graceful degradation) or redundant.

Dormant reliability analyses shall be done and an aging and surveillance program shall be established for pyrotechnics, explosives, rocket motors, and other items that have limited or require minimum service-life. The program shall be required to verify safety in storage, handling, and in use as part of service-life determination.

Parts derating criteria shall be mutually agreed upon between the contractor and the government and must consider past component history, environmental stresses, and component criticality. Parts stress analysis and testing shall be performed to verify compliance with agreed-to derating criteria under worst-case mission profile environments.

For electronic circuitry, electrostatic discharge control procedures shall be included in the design, manufacturing, packaging, handling, and repair processes.

Reliability growth testing, using mission profile environments, shall be used to assure design maturity prior to operational testing. The results of formal reliability growth tests shall be used, when appropriate, to verify compliance with contractual performance requirements. If the results of reliability growth tests do not provide sufficient information, then reliability demonstration tests may be used to verify compliance with contractual requirements.

Predictions shall not be used to verify compliance with required contractual performance requirements.

Provisions for failure data collection, reporting, and analyses shall be established and mutually agreed upon between the government and the contractor.

Non-developmental items (NDI) or commercial off-the-shelf (COTS) items shall be shown to be operationally suitable for their intended use and capable of meeting their allocated reliability requirements.

See reference (b), paragraph 4.3.6, for further implementation requirements for all DON programs.

4.3.7 Environmental, Safety, and Health

The Assistant Secretary of the Navy (Research, Development and Acquisition) (ASN(RD&A)) is responsible for ensuring DON acquisition programs comply with DON environmental policy and is the focal point for all DON acquisition environmental issues.

The Assistant Secretary of the Navy (Installations and Environment) (ASN(I&E)) is responsible for formulating DON environmental, safety, and health (ESH) policy. ASN(I&E) advises ASN(RD&A) on environmental issues, to include review and comment on or endorsement of National Environmental Policy Act (NEPA) or Executive Order (EO) 12114 environmental documents (see the tables in paragraph 4.3.7.2 below). ASN(I&E), or designee, as a program decision principal advisor (see reference (l)), will attend program decision meetings (PDMs).

The Chief of Naval Operations (CNO) and Commandant of the Marine Corps (CMC) shall support ASN(RD&A) in developing ESH requirements, recommending mandatory acquisition ESH policy, assisting in ESH policy implementation, and providing ESH advice and assistance to acquisition personnel. See reference (b), paragraphs 3.3.6 and 4.3.7, for further implementation requirements for all DON programs.

4.3.7.1 National Environmental Policy Act

The ASN(RD&A) shall provide final approval authority for acquisition-related NEPA and EO 12114 documents. Approval of records of decisions (RODs) under NEPA may not be delegated. The

environmental documentation process tables for NEPA and EO 12114 in paragraph 4.3.7.2 below shall be followed by all programs where ESH evaluation determines there is a need for NEPA or EO 12114 documentation. See reference (b), paragraph 4.3.7.1, for further implementation requirements for all DON programs.

4.3.7.2 Environmental Compliance

The PEO, SYSCOM Commander, DRPM, and PM are responsible for environmental planning and compliance with environmental requirements for DON acquisition programs. See reference (b), paragraph 4.3.7.2, for further implementation requirements for all DON programs.

ENVIRONMENTAL DOCUMENTATION PROCESS--NEPA

DOCUMENT	PREPARED BY	ASSISTANCE/ CONCURRENCE BY	REVIEW/ ENDORSEMENT BY	APPROVAL/ SIGNATURE BY
Categorical Exclusion (CATEX) **NOTE:** Action could take 1 week to 2 months	PM or Designee	PEO/SYSCOM/DRPM Installation CO	ASN(I&E), Info Copy	PM, Sign
Environmental Assessment (EA) **NOTE:** Action could take 4-6 months.	PM or Designee	SYSCOM OPNAV N00N[1] Installation CO Counsel	CNO/CMC, DRAFT, Review[2] CNO/CMC, FINAL, Endorse[2] Counsel, Review ASN(I&E), Info Copy	PEO/ SYSCOM COMMANDER/ DRPM, Approve[3]
Finding of No Significant Impact (FONSI) **NOTE:** Action could take 2 months (after EA completion)	PM or Designee	SYSCOM OPNAV N00N[1] Installation CO Counsel	CNO/CMC, Endorse[2] Counsel, Review[4] ASN(I&E), Info Copy	PEO/ SYSCOM COMMANDER/ DRPM, Sign[3,5]
Environmental Impact Statement (EIS) NOI/DEIS/FEIS) **NOTE:** Action could take 12 to 18 months or longer.	PM or Designee	CNO/CMC OPNAV N00N[1] PEO/SYSCOM/DRPM Counsel	CNO/CMC, Review Counsel, Review ASN(I&E), Endorse	ASN(RD&A), Approve
Record of Decision (ROD) **NOTE:** Action could take 2 to 4 months (after completion of EIS).	PM/CNO/CMC	PEO/SYSCOM/DRPM OPNAV N00N[1] Counsel	CNO/CMC, Review Counsel, Review ASN(I&E), Endorse	ASN(RD&A), Sign[5]

(See footnotes for the NEPA table below the EO 12114 table on the next page.)

NOI - Notice of Intent
DEIS - Draft Environmental Impact Statement
FEIS - Final Environmental Impact Statement

ENVIRONMENTAL DOCUMENTATION PROCESS -- EXECUTIVE ORDER 12114

DOCUMENT	PREPARED BY	ASSISTANCE/ CONCURRENCE BY	REVIEW/ ENDORSEMENT BY	APPROVAL/ SIGNATURE BY
E. O. 12114 Negative Decision (Citing an Overseas CATEX or exemption) **NOTE:** Action could take 1 week to 2 months.	PM or Designee	PEO/SYSCOM/DRPM Installation CO	ASN(I&E), Info Copy	PM, Sign
Overseas Environmental Assessment[6] **NOTE:** Action could take 4 to 6 months.	PM or Designee	SYSCOM OPNAV N00N[1] Installation CO Counsel	CNO/CMC DRAFT, Review[2] FINAL, Review[2] Counsel, Review ASN (I&E), Info Copy	PEO/ SYSCOM COMMANDER/ DRPM, Approve[3]
Overseas EIS **NOTE:** Action could take 12 to 18 months	PM or Designee	CNO/CMC OPNAV N00N[1] PEO/SYSCOM/DRPM Counsel	CNO/CMC, Review ASN(I&E), Endorse[7]	ASN(RD&A), Approve
Environmental Review(ER)/ Environmental Study (ES) **NOTE:** Action could take 12 to 18 months.	PM or Designee	CNO/CMC OPNAV N00N[1] PEO/SYSCOM/DRPM Counsel	CNO/CMC, Review Counsel, Review ASN(I&E), Endorse[7]	ASN(RD&A), Approve
ER or ES Concluding No Significant Impact **NOTE:** Action could take 4 to 8 months.	PM or Designee	SYSCOM OPNAV N00N[1] Installation CO Counsel	CNO/CMC, Review[2] Counsel, Review ASN(I&E), Info Copy	PEO/ SYSCOM COMMANDER/ DRPM, Approve[3]

FOOTNOTES

1. Obtain concurrence from OPNAV N00N for acquisition programs involving nuclear propulsion matters.

2. When a PEO/SYSCOM/DRPM has a clear knowledge of the requirements as demonstrated by the preparation of acceptable EAs and FONSIs (or corresponding EO 12114 documents), the requirement for CNO/CMC review/endorsement shall cease. This decision will be made jointly by the PEO/SYSCOM/DRPM and CNO/CMC.

3. Approval/signature authority may only be redelegated when MDA has been redelegated below PEO/SYSCOM Commander/DRPM.

4. Upon request by PEO/SYSCOM Commander/DRPM.

5. The PM is responsible for ensuring public notification of FONSIs and RODs via appropriate medium. Where publication in the *Federal Register* is required, CNO/CMC will publish FONSIs and RODs.

6. The last page of the Overseas EA includes either (1) a Negative Decision that no significant harm will occur to the global commons, or (2) a conclusion that significant harm may occur to the global commons and an Overseas EIS must be prepared.

7. ASN(I&E) will coordinate with Department of State on actions (either unilateral or multilateral) affecting a foreign nation.

4.3.7.3 System Safety and Health

CNO may establish a System Safety Advisory Board(s). Policies of such a Board(s) are subject to review and approval by ASN(RD&A). See reference (b), paragraph 4.3.7.3, for further implementation requirements for all DON programs.

4.3.7.4 Hazardous Materials

Authorization for Navy and Marine Corps possession and use of radioactive material is granted by Radioactive Material Permits issued by the Navy Radiation Safety Committee. See reference (b), paragraph 4.3.7.4, for implementation requirements for all DON programs.

4.3.7.5 Pollution Prevention

See reference (b), paragraph 4.3.7.5, for implementation requirements for all DON programs.

4.3.8 Human Systems Integration

Total life-cycle cost, including logistics support and human systems integration (HSI), must be demonstrated as representing the lowest cost of ownership to the DON. Therefore, the PM shall, in coordination with the ACT, when established, ensure that HSI costs (e.g., manpower, personnel, training (MPT), human factors engineering, safety) and impacts are adequately considered, weighted, and integrated with other engineering and logistics elements beginning at program initiation. See reference (b), paragraphs 4.3.7 and 4.3.8, for further implementation requirements for all DON programs.

4.3.9 Interoperability

Reference (m) establishes Marine Corps management procedures to ensure compliance with both intraoperability and joint interoperability standards. System design shall take into account potential international programs ramifications as an integral part of the design process. For international cooperative programs, these design considerations are mandatory. For U.S.-only development efforts, the PM shall consider designing the proposed system with a potential for eventual international sales and support. See reference (b), paragraph 4.3.9, for further implementation requirements for all DON programs.

4.4 Other Design Considerations

4.4.1 Survivability

When developing survivability characteristics for critical weapon systems, PMs shall address all aspects of survivability including the effects of nuclear, chemical, and biological

contamination and shall consider such affects in test and resource planning. PEOs, SYSCOM Commanders, DRPMs, and PMs shall use the technical resources of the Army Chemical and Biological Defense Command, where appropriate. See reference (b), paragraph 4.4.1, for further survivability implementation requirements for all DON programs.

4.4.2 Work Breakdown Structure

See reference (b), paragraph 4.4.2, for implementation requirements for all DON programs.

4.4.3 Standardization Documentation

In accordance with references (n) and (o), certain military and federal specifications and standards shall not be imposed in program solicitations without a waiver approved by the MDA. A waiver approved by the MDA is also needed to cite canceled military specifications and standards as requirements in program solicitations. The acquisition strategy, acquisition plan, or separate memorandum may be used for this purpose. Canceled military specifications and standards may still be needed, on an exception basis, for new acquisitions or reprocurements. PMs shall evaluate the cost effectiveness, risk, and benefits of the transition to a performance-based reprocurement technical design package. Military specifications and standards that need approved waivers to be cited as requirements on program solicitations also shall be identified to the MDA when cited for guidance on program solicitations.

Waivers for the use of military specifications and standards shall not be required when:

1. Reprocuring a system or components that are already in the inventory.

2. A contractor proposes the use of military specifications and standards in preparation for or as a result of solicitation requirements.

The Director, Naval Nuclear Propulsion shall determine the specifications and standards to be used for naval nuclear propulsion plants in accordance with Public Law 98-525 (Title 42, U.S.C., Section 7185 Note).

An order of preference for selection of specifications and standards shall be included in each contract in accordance with reference (p).

All solicitations equal to or greater than $100,000 shall contain language to encourage contractors to submit alternative solutions to specifications and standards. Contractors, with contracts exceeding $500,000 which have substantial effort remaining, shall be encouraged to propose alternative solutions

to specifications and standards.

Each new contract shall have language which states that all specifications and standards cited and first-tier references shall be mandatory for use. The contract shall also state that lower tier references shall be used for guidance only and that specifications in drawings are considered first-tier references.

The DON Standards Improvement Executive (SIE) shall report to ASN(RD&A). The DON SIE shall direct implementation of the Defense Standards Improvement Program policies and procedures, assist in their development, and serve on the Defense Standards Improvement Council. The DON SIE and SYSCOM SIEs shall oversee the review of existing military specifications and standards to determine which will be processed for department-wide waivers. Such department-wide waivers shall be identified in acquisition strategies or acquisition plans.

4.4.3.1 Single Process Initiative

PEOs, SYSCOM Commanders, and DRPMs shall identify a single point of contact to assist the Acquisition Reform Executive (ARE) in the implementation of the Single Process Initiative within their commands. For existing DON contracts, the procedures and responsibilities set forth below and in reference (f) shall apply.

4.4.3.1.1 Administrative Contracting Officers (ACO) in DON Supervised Contract Administration Offices (CAO)

The ACO shall initially notify key DON customers when a contractor volunteers to participate in the single process initiative (key customers are notionally defined as those who represent 80 percent of the total dollar value of affected contracts at the contractor's facility). The Naval Nuclear Propulsion Program is hereby designated a key customer for all concept papers or proposals affecting contracts for components and systems used in naval nuclear propulsion plants. The ACO shall obtain Naval Nuclear Propulsion Program concurrence for all proposed actions in those cases.

The ACO shall request from the DON program office most affected by the proposal and having the largest contract dollar value at the contractor's facility, that an individual be designated as the DON team leader. The DON team leader shall be appointed in writing by the ARE and shall be identified to all DON customers by the ACO.

In those cases where non-DoD departments or agencies have contracts administered by a CAO, ACOs shall not include non-DoD contracts in the single process initiative agreement without prior approval of the non-DoD department or agency. The CAO shall bring to the attention of non-DoD departments or agencies that single process initiative concepts or proposals have been

submitted by the contractor for DoD contracts and encourage the cooperation and participation of the non-DoD department or agency.

4.4.3.1.2 PEOs, SYSCOM Commanders, and DRPMs

The program office most affected by the single process proposal and having the largest contract dollar value shall nominate a senior member of the acquisition workforce as the DON team leader representing the DON customers on single process initiative issues at a specific contractor's facility. The program office shall obtain concurrence with the nomination of the DON team leader from the applicable PEO, SYSCOM Commander, or DRPM and shall coordinate with other key DON customers. The DON team leader nomination shall be submitted to the ARE for appointment in writing. Any non-concurrence with the nomination shall also be submitted to the ARE, with appropriate justification and recommendations for an alternative DON team leader.

PEOs, SYSCOM Commanders, and DRPMs shall provide subject matter experts or expert team members to review and make recommendations on the acceptability of the contractor's single process proposal.

Appointment of a DON team leader shall not relieve the PM from accountability for ensuring single process initiatives do not adversely impact programs under their cognizance. Appeals by PEOs, SYSCOM Commanders, DRPMs, or PMs, concerning single process proposal decisions being considered by the DON team leader, shall be made to the Department of the Navy (DON) Acquisition Executive (NAE) via the ARE.

4.4.3.1.3 DON Team Leader

The DON team leader shall represent DON customers and have the authority to make decisions on all issues related to the review and approval of single process concepts and proposals submitted by a contractor for a specific facility. For any contractor concepts or proposals affecting components or systems used in naval nuclear propulsion plants, Naval Nuclear Propulsion Program concurrence shall be obtained prior to approval of the concepts or proposals.

The DON team leader shall request assistance, as necessary, from subject matter experts or expert team members from PEOs, SYSCOM Commanders, DRPMs, or program offices. These subject matter experts or expert team members shall review and provide comments and recommendations on the acceptability of the single process concept and proposal.

The DON team leader shall brief, solicit recommendations from, and achieve consensus with the other affected DON PMs and buying activities on the acceptability of the single process

concept and proposal. The DON team leader shall provide sufficient details of the concept and proposal to the affected DON PM and buying activities to allow an assessment of the impact on their programs and deliverables. The DON team leader is also responsible for facilitating consensus with the other Component team leaders.

When consensus cannot be reached on the acceptability of the contractor's single process proposal within DON program offices and buying activities, the DON team leader shall present the disputed aspects of the proposal to the ARE who shall facilitate a review and decision by the NAE.

When consensus cannot be reached on the acceptability of the contractor's single process proposal with the other Component team leaders, the DON team leader shall present the proposal to the ARE who shall facilitate a review and decision by the NAE. The NAE decision shall be the DON position when the proposal is presented for review and decision by the Defense Acquisition Executive (DAE) designee.

4.4.3.1.4. Acquisition Reform Executive

The ARE shall appoint the DON team leader in writing. Appointments shall designate the DON team leader as the authority responsible for concurrence for DON programs on single process block modification changes at a specific contractor facility.

When the nomination of the DON team leader is appealed by PEOs, SYSCOM Commanders, or DRPMs, the ARE may consider the appointment of alternative DON team leaders, or even co-leaders in exceptional cases.

The ARE shall directly participate in the review and provide a recommended decision concerning single process proposals to the NAE in the following cases:

1. When consensus cannot be reached at the DON level on the acceptability of the proposal.

2. When consensus cannot be reached at the DoD level on the acceptability of the proposal.

4.4.3.1.5 Service Acquisition Executive

The NAE shall directly participate in the review and disposition of single process proposals in the following cases:

1. When consensus cannot be reached at the DON level on the acceptability of the proposal.

2. When consensus cannot be reached at the DoD level on the acceptability of the proposal.

4.4.4 Metric System

The Commander, NAVSEASYSCOM is responsible for administration of DON participation in the DoD Metrication Program. See reference (b), paragraph 4.4.4, for further implementation requirements for all DON programs.

4.4.5 Program Protection

Each DON program shall consider program protection planning, which encompasses security, acquisition systems protection, systems security engineering, counterintelligence, and operations security (SASCO) requirements. SASCO requirements are contained in reference (q). An illustrative format for a discretionary Program Protection Plan is provided in the Deskbook (DON Section) and in reference (r). See reference (b), paragraph 4.4.5, for further implementation requirements for all DON programs.

4.4.6 Information Systems Security

To execute the requirements set forth in reference (b), the PM shall comply with the information systems security policy of reference (s) for all weapons and information technology systems. Compliance with reference (s) specifically includes:

1. Making a risk determination based on system criticality and threat,

2. Assessing vulnerabilities for systems at risk during design and development,

3. Incorporating appropriate countermeasures, and

4. Demonstrating countermeasures effectiveness through the certification process.

See reference (b), paragraph 4.4.6, for further implementation requirements for all DON programs.

4.4.7 Electromagnetic Environmental Effects (E3) and Spectrum Management

Spectrum certification (i.e., equipment frequency allocation) shall be obtained prior to obligating funds in accordance with reference (t). DON procuring activities shall initiate applications for frequency allocation as soon as radio frequency bands of operation for C4I systems are identified.

Electromagnetic compatibility shall be emphasized during the DON acquisition process and integrated into developmental and operational tests in accordance with reference (u).

CNO (N6) is designated the DON executive for spectrum management and electromagnetic compatibility. The requirements in references (t) and (u) are applicable to all DON acquisition programs including NDI/COTS and advanced concept technology demonstrations. See reference (b), paragraph 4.4.7, for further implementation requirements for all DON programs.

4.4.8 Unplanned Stimuli

See reference (b), paragraph 4.4.8, for implementation requirements for all DON programs.

4.4.9 Value Engineering

See reference (b), paragraph 4.4.9, for implementation requirements for all DON programs.

4.4.10 Mapping, Charting, and Geodesy (MC&G) Support

Guidance for identifying and funding unique MC&G products required by a system under development is found in reference (v).

All DON MC&G support requirements will be coordinated with CNO/CMC, as appropriate.

4.4.11 Precise Time and Time Interval (PTTI) Support

The Superintendent of the U. S. Naval Observatory is designated as the DoD and DON PTTI Manager and shall maintain standard astrogeophysical products.

4.4.12 National Environmental Support

In accordance with reference (w), CNO is responsible for coordinating and implementing operational oceanographic and astrogeophysical support requirements for all DoD users. PMs shall task CNO (N096) for meteorology and oceanography (METOC); mapping, charting, and geodesy (MC&G); PTTI; and astrometry support as early as possible in the development cycle to ensure timely availability of products and services.

4.4.13 Government-Industry Data Exchange Program (GIDEP)

Reference (x) provides specific Navy requirements and procedures for participation in the GIDEP program.

The Commander, NAVSEASYSCOM is responsible for coordinating, programming, and executing the GIDEP for DON.